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EDITOR'S MESSAGE

Welcome to this issue of our CHARM newsletter, dedicated to the multifaceted approach to shoulder pain management. Shoulder pain is a common yet complex condition that affects a significant portion of the population, often leading to a substantial impact on daily life and overall well-being. This issue brings together leading experts from various fields to provide a comprehensive perspective on managing shoulder conditions, highlighting the importance of an integrated, multidisciplinary approach.

Shoulder joint is an articulation between the scapula and the humerus and is one of the most complex and mobile joints in our body. It consists of the following key structures:

1. **Bone & cartilage:** The shoulder joint is formed by the articulation between the humerus and glenoid fossa of the scapula. The glenoid fossa is lined by a rim of fibrous cartilage called the labrum to better accommodate the head of the humerus. The clavicle also plays a pivotal role in stabilizing the scapula.
2. **Joint Capsule and ligaments:** The shoulder joint, which is a fibrous envelope that encloses the shoulder joint is lined by a fibrous outer layer and synovial inner layer. The joint capsule is reinforced by various structures to enhance stability: glenohumeral ligaments, coracohumeral ligament and the rotator cuff muscles.
3. **Muscle and tendons:** The extensive range of movement of the shoulder joint is facilitated by its surrounding muscles, in particular rotator cuff muscles (supraspinatus, infraspinatus, subscapularis and teres minor).
4. **Bursa:** Small fluid-filled sacs surrounding the shoulder joint to facilitate movement and reduce friction between tendons and bone interfaces, e.g. subacromial-subdeltoid bursa, sub scapular recess etc.

Our contributors include esteemed rheumatologist, orthopaedic surgeon, rheumatology nurse, physiotherapist, occupational therapist, and practitioner of traditional Chinese medicine. Each expert sheds light on their unique approach, offering insights that are invaluable for both practitioners and patients. By combining modern medical practices with holistic and complementary techniques, we aim to present a well-rounded understanding of shoulder pain management.

From the latest advancements in diagnostics and surgical interventions to practical exercises and traditional therapies, this issue offers a wealth of information designed to help our readers navigate the complexities of shoulder pain. We hope you find these diverse perspectives enlightening and that they empower you to implement effective, patient-centred care strategies.

CHARM newsletter focuses on different rheumatic diseases for the benefit of healthcare professionals who look after the arthritis patients, the electronic version of which is available at <https://www.hkarf.org/for-professionals/charm-newsletter/>

Scholarships & Research Grants: The Hong Kong Arthritis and Rheumatism Foundation (HKARF) and the Hong Kong Society of Rheumatology (HKSR) are providing a limited number of awards for doctors and allied health professionals to support overseas specialty training in rheumatology. HKARF also awards research grants, on an annual basis, to support doctors/healthcare professionals/scientists involved in the management/study of patients with chronic arthritis and rheumatic disorders, in conducting research projects which provide new insights for the care of this group of patients. Application details can be found at <https://www.hkarf.org/for-professionals/research-grant-scholarship/>

COMMON ORTHOPAEDIC SHOULDER PATHOLOGIES AND THEIR MANAGEMENT

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Introduction:

After low back pain and knee problems, shoulder pain is one of the common musculoskeletal problems in middle-aged and elderly people, which account for 1-2% of all consultations in family care.¹ Because of the pain, patients also suffer from functional disabilities which may interfere with their job, social and sports activities. Eventually, patients may have psychological distress and the quality of life may be affected.² The annual financial burden of shoulder pain management was estimated to be \$3 US billion per year in United Kingdom.³ The common pathologies in shoulder in middle aged include frozen shoulder, subacromial impingement, glenohumeral arthritis and shoulder instability. This article describes the above pathologies in details and subsequent management accordingly.

Subacromial shoulder pain:

Subacromial shoulder pain is located at the lateral side of affected shoulders. According to literature, subacromial pain accounts for up to 70% of shoulder problems.⁴ The subacromial space is a space between acromion above and rotator cuff below. The impingement syndrome is a common cause of subacromial shoulder pain. The pain is aggravated by overhead activity. Patients may complain of pain during nighttime and have difficulty in sleeping over affected side. The pain is usually associated with rotator cuff pathologies such as tendonitis or rotator cuff tear. Secondary causes of impingement syndrome include old fractured greater tuberosity with nonunion or malunion, subacromial bursitis and os acromiale. On examination, patients may demonstrate “painful arc syndrome” - pain during abduction between 60 and 120°.

Glenohumeral osteoarthritis:

Glenohumeral osteoarthritis (OA) is another common cause of shoulder pain. The prevalence of glenohumeral OA is not exactly known. One study showed 16% to 20% of elderly more than 65 years with radiological evidence of glenohumeral osteoarthritis.⁵

The general risk factors for developing glenohumeral OA include female sex, Caucasians and obesity. Other risk factors causing glenohumeral osteoarthritis include prior fractures around the shoulder joint, rotator cuff arthropathy and underlying autoimmune diseases such as rheumatoid arthritis and systemic lupus erythematosus. Patients with glenohumeral OA usually complain of shoulder pain and limited range of motion, which is due to osteophyte and capsular thickening. The pain could even worsen at night, causing sleep disturbance. As disease deteriorates, patients may feel catching, blocking and crepitus when moving the affected shoulder.

Frozen shoulder:

Frozen shoulder, also known as adhesive capsulitis, is a common disorder of shoulder with a prevalence of 2-5% in general population. Women are more affected than men. The disorder is more common in patients around 50-60 years old.⁶ The cause of frozen shoulder may be idiopathic or secondary to trauma, surgery, autoimmune diseases and rotator cuff tear, etc. The other risk factors include cardiovascular disease, stroke, thyroid diseases and diabetes mellitus.⁷ According to literature, up to 60% of patients with diabetes mellitus would develop frozen shoulder.⁸ Frozen shoulder has three stages, namely freezing, frozen and thawing. At freezing or inflammatory stage, patients mainly complain of pain with progressive limitation of movement. At frozen stage, patients experience less pain but increasing stiffness. Eventually, the range of motion is gradually improved during thawing stage. The whole process may last for 2 years.

COMMON ORTHOPAEDIC SHOULDER PATHOLOGIES AND THEIR MANAGEMENT

Diagnosis of shoulder pain:

Accurate diagnosis of shoulder pain is important in shoulder pain as the management of different pathologies varies. A detailed history and proper physical examination can help to arrive a provisional diagnosis. Limitation in active as well as passive range of motion may suggest frozen shoulder or glenohumeral osteoarthritis. Weakness of rotator cuff may suggest rotator cuff tear.

Radiography is a simple but necessary test to differentiate if the pathology arises from bone or soft tissue. In glenohumeral arthritis, X-ray may show joint space narrowing together with osteophytes formation. Proximal migration of humeral head with decreased acromio-humeral distance are evident of massive rotator cuff tear. Magnetic resonance imaging (MRI) may help to diagnose soft tissue pathologies around shoulder such as rotator cuff tears or biceps pathology. In case of frozen shoulder, MRI would show thickening of capsule along the axillary pouch.

Treatment of shoulder pain:

1. Non-operative treatment:

Non-operative treatment is still the mainstay and first step treatment for most shoulder pain. Non-steroidal anti-inflammatory and physical therapy have shown benefit to half of patients with shoulder pain.⁹ The importance of physical therapy is to maintain the motion of affect shoulder to prevent secondary frozen shoulder.

In case of shoulder pain caused by subacromial impingement or rotator cuff tendinitis despite conservative treatment, subacromial injections of steroid remain one of the most common non-operative treatment.¹⁰ In frozen shoulder, early steroid injections have showed better outcomes.

2. Operative treatment:

Surgery is indicated for chronic shoulder pain if patients showed no response after 3-6 months of non-operative treatment. Arthroscopic assisted shoulder surgery is an effective method to deal with subacromial impingement, rotator cuff and biceps pathologies. In case of intractable frozen shoulder, manipulation under anesthesia and arthroscopic assisted capsular release is another treatment option which is effective as physiotherapy.¹¹ Shoulder replacement is indicated if patients with advanced glenohumeral arthritis rotator cuff arthropathy.

Conclusion:

Shoulder pain is a common musculoskeletal problem encountered by most orthopaedic surgeons. Accurate diagnosis relies on detail history, physical examination and imaging. Non-operative treatment is still an effective modality for most patients with shoulder pain. Surgery is reserved for patients who showed poor response to non-operative means.

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“WHY IS MY SHOULDER ACHING?”: POLYMYALGIA RHEUMATICA AND ITS MIMICS

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Shoulder pain is a common complaint encountered by healthcare professionals almost on a daily basis, a complaint that we often respond to with ‘Panadol and physiotherapy’. It is often difficult to get the exact diagnosis for the pain as there are so many differentials, one of which is the often overlooked condition of polymyalgia rheumatica (PMR).

While the exact mechanism behind PMR is unknown, it is believed to be a rheumatic condition caused by inflammation in periarticular structures, resulting in its typical features as listed below. Annual incidence of PMR ranges between 13 to 113 cases per 100,000 in European countries and is about 2 to 3 times more common in females¹. PMR was noted to be more prevalent among those of northern European and Scandinavian descent and less so in Asian, African American, and Latino populations^{1,2}. However, there has not been any large-scale epidemiological study specific for Chinese population. A team in Singapore reported an estimate by conducting a survey on the disease patterns of rheumatology outpatients in their population of mainly Chinese patients (N = 3,911, 76.2%)³. Out of the 5,130 patients in the study, only 16 (0.4%) was labelled with PMR.

The most typical presentations of PMR include pain and morning stiffness in the shoulders and hips. The typical age of onset is over 65 and PMR mainly affects women. To make a diagnosis of PMR, rheumatologists are given the task to exclude alternative diagnoses. There are multiple conditions that can cause a similar clinical picture as PMR, including rheumatic diseases (rheumatoid arthritis, osteoarthritis, crystal arthropathy, myositis, fibromyalgia, etc.) and non-rheumatic conditions (rotator cuff disease, adhesive capsulitis, etc.). PMR patients often develop systemic symptoms, such as weight loss, fever, and fatigue. Giant cell arteritis, a potentially sight-threatening condition, is closely linked to PMR and should be actively looked for in these patients. Also, we have yet to identify a biological marker that can be used in diagnosing PMR. To complicate matters, Chinese PMR patients seem to present slightly differently when compared to western countries. An article published by our own centre found that our patients had significantly longer duration of symptoms before diagnosis of PMR, as well as less complaints of bilateral upper arm tenderness and generalised stiffness⁴.

A diagnosis of PMR is made after considering clinical, laboratory and sometimes imaging findings. These include classical girdle involvement, presence of systemic symptoms, raised erythrocyte sedimentation rate, and ultrasound findings. The European Alliance of Associations for Rheumatology (EULAR) and the American College of Rheumatology (ACR) published a set of classification criteria in 2012 and had included the use of ultrasound (USG) findings, if available, in the diagnosis of PMR, such as subacromial subdeltoid bursitis, biceps tenosynovitis, or glenohumeral synovitis. The utilisation of USG improved the sensitivity and specificity of this set of criteria to 92.6% and 91.3% respectively. Unfortunately, there are still drawbacks. Firstly, the EULAR/ACR criteria is aimed for epidemiological study, not individual diagnosis. Secondly, a Japanese team found that only two-thirds of PMR patients diagnosed by the traditional Bird’s criteria met the new EULAR/ACR criteria, raising suspicion that the new criteria may not be universally applicable⁵.

It would, therefore, be wise to always be cautious when it comes to the diagnosis of PMR and remember the alternative explanations of shoulder pain at all times at the back of our minds. Positivity in RF or Anti-CCP, symmetrical small joint involvement, as well as presence of extra-articular symptoms may favour the diagnosis of rheumatoid arthritis; plain radiographs might provide evidence of osteoarthritis and crystal arthropathies; watch out for new-onset headache, jaw claudication, and visual symptoms, as PMR may be part of the presentation of giant cell arteritis. These are just a few examples of possible differentials.

“WHY IS MY SHOULDER ACHING?”: POLYMYALGIA RHEUMATICA AND ITS MIMICS

When it comes to management, PMR is characterised by its rapid response to low to moderate doses of oral glucocorticoids (so a suboptimal response should be a red flag for clinicians to consider other differential diagnoses), which is the mainstay of treatment. Intramuscular administration of steroid is another option, but its benefit seems to be less sustainable than oral route. PMR, sadly, is prone to relapse when glucocorticoid is tapered, but the side effects of systemic steroid are also a main source of comorbidities among PMR patients. A steroid-sparing strategy is, therefore, sorely needed. Disease modifying agents, such as methotrexate, was investigated but showed conflicting results. A recent major step forward is the use of biologics, especially with interleukin 6 (IL6) blockade. Trials such as SPARE, SEMAPHORE, and SAPHYR have not only showed the efficacy of anti-IL6 in PMR patients, but also how the use of anti-IL6 allows clinicians to taper off corticosteroids more quickly.

To conclude, PMR is an important cause of shoulder pain especially among individuals aged 65 or above. A clinical diagnosis is made based on clinical, laboratory and imaging findings, after exclusion of alternative causes. PMR is highly-treatable and usually responds well to steroid therapy.

Having learnt more about PMR, here are a few multiple choice questions to help us consolidate our understandings!

Which of the following descriptions fits best with the most typical PMR symptoms?

- A) 35 year-old man with pain lower back and shoulder. HLA-B27 was positive.
- B) 50 year-old man with left shoulder pain especially when abducting beyond 90 degrees.
- C) 70 year-old lady with a recent weight loss complaining of bilateral shoulder and hip pain.
- D) 55 year-old lady with bilateral small hand joints, wrists, and shoulder pain for 3 months.

Answer: C. Other descriptions favour alternative diagnoses.

Which of the following ultrasound findings is most likely suggestive of PMR?

- A) Periarticular erosions.
- B) Doppler signal over synovium.
- C) Subacromial subdeltoid bursitis.
- D) Reduced sliding of the infraspinatus tendon.

Answer: C. Presence of erosive arthritis (periarticular erosions), active synovial inflammation (Doppler signal over synovium) and adhesive capsulitis (reduced sliding of infraspinatus tendon) may suggest other differentials instead of PMR.

Which of the followings is the recommended management for newly diagnosed PMR?

- A) Start oral prednisolone after ruling out other differential diagnoses.
- B) Perform intraarticular glucocorticoid injections to affected sites.
- C) Start with simple analgesics and physiotherapy in fear of glucocorticoid side effects.
- D) Start with biologics, such as anti-interleukin 6, alone.

Answer: A. Effect of intraarticular glucocorticoid injection is less sustainable than oral route. Use of biologics in PMR is being investigated by multiple studies but has yet to be incorporated into management recommendations.

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BENEFITS OF HYDROTHERAPY AS PHYSIOTHERAPY MANAGEMENT FOR SHOULDER PAIN AND ARTHRITIS CONDITIONS

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Shoulder pain is commonly experienced among patients with inflammatory arthritis. Chronic inflammation may gradually erode joint surface of the glenohumeral joint while soft tissue like rotator cuff may be pathologically weakened and thus vulnerable to tear and rupture¹. These may cause not only pain, but limitations in shoulder range of motion (ROM) and muscle weakness, leading to a decline in physical functions and activities¹.

Treatment of shoulder pain among patients with underlying arthritis aims at relieving pain, improving mobility and flexibility, as well as promoting strength, stability and physical functions¹. Although pain may be relieved through electro-physical treatment modalities, such as transcutaneous electrical nerve stimulation (TENS), the effect is often short-lasting¹. To attain long term effect in symptoms modification, one's posture and ergonomics in daily activities shall be analysed and corrected accordingly in the case of faulty mechanics¹. Different types of exercises, including stretching, strengthening, stabilization and mobility training might be prescribed corresponding to individual's needs in order to rectify muscle tightness, weakness or imbalance, as well as enhance joint stability or mobility. Manual therapy, such as joint mobilisation, soft tissue massage and release, may also be incorporated in the treatment regimen if indicated.

Benefits of Hydrotherapy

Among various treatment modalities, hydrotherapy exerts unique effect for patients suffering from inflammatory arthritis. Hydrotherapy, also known as aquatic therapy, is a form of physiotherapy which involves immersing and exercising in warm water². It utilises the properties of water including buoyancy, resistance and surface tension, to promote mobility, muscle strength and endurance, cardiovascular capacity, as well as pain relief and muscle relaxation³.

Hydrotherapy has several advantages over land-based training in the management of inflammatory arthritis. First, water offers buoyancy to alleviate loading and impact force taken up by articular structures, which may in turn reduce discomfort or pain experienced during exercise. Second, water provides a safe environment for stability and balance training turbulence and perturbations are natural following motion in water which challenge patients to maintain stability, at the same time, water gives cushioning and support in the case of loss of balance. Third, through choosing different exercise tools, water may either serve as a resistance or assistance to the desired motion. Together with the benefits from warm water immersion, which enhances blood circulation and body relaxation, patients with inflammatory arthritis often find it easier to exercise in water, boosting exercise compliance and effect of training^{2,3}.

A systematic review conducted by Al-Qubaeissy et al. compared the effect of hydrotherapy to other forms of non-pharmacological interventions in the population with rheumatoid arthritis (RA). It is evident that hydrotherapy is effective in reducing pain, joint tenderness, and improving physical functions, such as grip strength, joint mobility, as well as emotion and quality of life². Furthermore, it might be more favorable to land-based training in terms of pain management and promoting physical functions as reported in some randomised trials included in this review.

Controlled trials in ankylosing spondylitis, RA and other inflammatory arthritis were analyzed in another systemic review conducted by Medrado et al. Apart from its efficacy in RA as reported by Al-Qubaeissy et al., hydrotherapy is also efficacious in other forms of inflammatory arthritis^{2,3}. Hydrotherapy is seemingly a more appealing form of exercise for pain and symptom modification, as well as improving one's physical capacity for the population suffering from inflammatory arthritis, due to its features aforementioned.

BENEFITS OF HYDROTHERAPY AS PHYSIOTHERAPY MANAGEMENT FOR SHOULDER PAIN AND ARTHRITIS CONDITIONS

Specifically, for the management of shoulder arthritis, hydrotherapy has been shown to improve shoulder mobility and muscle endurance in a trial involving a group of RA patients, with comparison to the controls who received land-based home exercise⁴. After twelve weeks of training, the hydrotherapy group demonstrated greater improvement in the range of forward flexion, abduction, and performance in isometric abduction endurance test than the controls. It suggested the benefits of hydrotherapy in shoulder pain management, especially among the population suffering from inflammatory arthritis.

Figure A:



Figure B:



Figure A and B demonstrated an exercise working on shoulder strength and core stability.

Figure C:



Figure D:



Figure C and D demonstrated another exercise which demands strength from upper extremities and core stabilization.

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COMPREHENSIVE NURSING CARE FOR THE RHEUMATOID ARTHRITIS PATIENT WITH SHOULDER PAIN

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Rheumatoid arthritis (RA) is a long-lasting autoimmune disease causing inflammation in the joints.^{1,2} The immune system attacks the body's own tissues, especially the lining of joints. The specific cause is not known. It mainly affects the small joints of the body, namely fingers and toes. The arthritis usually affects both sides of the body symmetrically. If not treated properly, it can destroy joints overtime. This happens as the cartilage and bone erosion occurs. It will lead to deformation and dysfunction of the affected joints. Proximal joints such as shoulders can also be affected especially in long-standing refractory RA patients over one to two decades. The persistent peripheral joint synovitis leads to progressive structural damage and loss of articular function. Locomotor impairment becomes significant within this time frame owing to the incremental erosion of diarthrodial joints ultimately resulting in joint contracture, ankylosis, and disability.

COMPREHENSIVE NURSING CARE FOR THE RHEUMATOID ARTHRITIS PATIENT WITH SHOULDER PAIN

The clinical manifestations of RA frequently hinder completion of activities of daily living (ADLs) and instrumental ADLs.³ Basic mobility tasks, including ambulation, transitional movements, and stair climbing, along with self-care activities such as dressing, bathing, and toileting, are often compromised by joint inflammation, pain, and progressive loss of range of motion. Additionally, fine motor tasks requiring manual dexterity like using keyboards become increasingly challenging. The impairment in physical functional status also reduce work productivity and performance of occupational duties. Moreover, shoulder pain is very common. It can be caused by problems within the shoulder joint itself or can be pain that is referred from other areas like the neck, diaphragm, or organs. Centralized pain, caused by a process called central sensitization, occurs in 10 to 40 percent of patients with RA and systemic lupus erythematosus.⁴ This type of pain arises from increased sensitivity of the central nervous system rather than from damage to joint tissues.

As a nursing professional, it is important to thoroughly assess patients presenting with shoulder pain to determine the underlying cause. A careful history and physical examination should be conducted to differentiate whether the pain originates from injury, fracture, referred pain from RA, or other shoulder joint pathologies. Identifying the etiology of the patient's shoulder complaint guides appropriate workup and targeted nursing interventions. There are still some inconsistencies in how chronic and centralized pain are understood. Chronic pain can be grouped into inflammatory pain (like RA), focal structural pain (from localized tissue injury), and neuropathic pain (from nerve damage). RA pain was seen mainly as inflammatory. Research increasingly shows that other factors, including central sensitization in the nerve system, also play a role in rheumatoid pain.⁵ More research is needed to understand the different causes of chronic pain.

There are several recommendations for the care of RA patients experiencing shoulder pain.^{1,6} Patients are generally advised to (1) avoid stressing the affected shoulder by heavy lifting or carrying loads, (2) use the less unaffected arm and/or sides as much as possible for daily activities, (3) rest the affected shoulder as much as possible during acute flares and use slings or supports to limit painful motion, (4) avoid painful overhead movements and activities requiring excessive range of motion. Gentle exercise may help to maintain mobility when not in a flare. Furthermore, patients may use appropriate assistive devices for walking and support on the unaffected side.

Pain and inflammation could be managed with multi-modal interventions like cold packs, heat, and non-steroidal anti-inflammatory drugs (NSAIDs).^{7,8} Patients should seek medical advice promptly if symptoms persist or suddenly worsen as that may indicate progression of joint damage or other complications. Nurses should refer patients to physiotherapists as deemed appropriate who can prescribe gentle, targeted exercise to help maintain range of motion and joint health.

In addition to conventional pain relief methods, lifestyles changes and mind-body practices are recommended. Reducing excess weight decreases mechanical stress on the inflamed joints. A balanced diet with omega-3s may help some patients.⁹ Regular and low-impact exercise may preserve joint mobility. Practicing relaxation techniques aids in pain management and coping. Last but not least, addressing fatigue, stress, and emotional health in relation to the disease management journey and supports overall wellbeing are vital to shoulder pain management.

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SHOULDER PAIN MANAGEMENT IN DAILY ROUTINE

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Common shoulder pain in rheumatology patients could be related to problems of bone, joint, bursa and muscles as a result of arthritis, fracture, erosion, bursitis, tendinitis, tendon tears, adhesive capsulitis, acromioclavicular joint (ACJ) instability or dislocation. Shoulder pain affected most of the activities of daily living (ADLs) involving elevation of shoulder with upper arm rotation such as combing hair, wringing towel, dressing, pulling pants up, wipe after voiding and reaching for objects in a cabinet. Shoulder pain also affects the stability of hands, affects sleep quality and impacts on psychological wellbeing leading to depression, anxiety, and stress.

Occupational therapy (OT) aimed to alleviate pain, prevent further deterioration, promote patient's recovery and independence in ADL, work and leisure by means of fascia therapy, mobilization and strengthening; training on proper body mechanics during ADL, work and leisure; fabricating supportive splinting and bracing to enhance structural support; prescription of aids and gadgets; and self-management strategies. To provide effective and comprehensive shoulder pain management to patients with arthritis, occupational therapist should acquire diagnosis and disease activity of underlying rheumatological conditions to formulate intervention plan in immediate and long term, such as restorative or compensatory targets. OT could provide corresponding intervention, following doctor's intervention e.g. intra-articular steroid injection or manipulation under anesthesia (MUA), such as fabricating supportive bracing and providing training to patients with proper mechanics during ADLs and work; advising joint protection strategies and home program.

The following table summarized the OT suggestions to patients at the time of acute inflammatory phase:


Goals	To avoid	Suggestions
Avoid excessive stress on shoulder joint: - Minimize load to pectoris and biceps muscle - Minimize rotational force on shoulder	Lying on the painful side when sleeping Carrying heavy objects on forearm OR using small wheeled-trolley Wringing large towels	Proper head and neck supporting posture and devices e.g. pillow, braces Use of 4 large wheeled-trolley (each wheel at least 4 inches in diameter) to carry heavy things Use small towels instead
Patient self-management		Basic relaxation techniques: - Progressive muscle relaxation - Breathing focus
Prevent deterioration in range of movement	Aggressive stretching should be avoided during inflammatory phase	Gentle Stretching of surrounding muscles e.g. pectoris, latissimus, biceps, as appropriate
Improve steno-clavicular and scapulo – thoracic mobility and rhythm		- Fascia therapy - Proper body mechanics in ADLs and work

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After stabilization of acute inflammation stage, shoulder condition should be enhanced by improving proprioception, range of motion, scapulo-thoracic mobility and muscle strength. For muscle strengthening, muscle balance must be put into consideration such as rotator cuff, scapula pivotors, humeral positioner and power drivers etc. through pendulum exercise, progress to isometric and eccentric training. Core and upper back muscles strengthening should be included to provide basic stability. However, patients may develop pain or recurrent injury due to overwork or inappropriate body mechanics during training or resumption of daily routines, which might eventually hinder the rehabilitation progress. Thus, ongoing OT follow up to optimize ADL and work function according to the shoulder condition and biomechanical efficiency is necessary. Mind-body relaxation e.g. health qigong could also be introduced. With a series of postures or flowing movements of practices, health qigong offers a mental focus that can help distract patients from pain, enhance flexibility, balance and understanding of own body positioning.

Patients with severe shoulder instability and muscle tears may need to undergo orthopedic surgery to regain structural stability and functional independence and to prevent chronic shoulder pain and functional deficit. In case surgery is deemed unsuitable due to underlying comorbidities, patients are encouraged to compile on appropriate bracing during the acute phase, e.g. AC joint brace or shoulder sling to optimize the joint stability and pain. While functional deficit cannot be fully corrected by bracing, it could optimize pain control and joint stability. OT can also offer home or workplace modification to overcome the functional deficit, for example:

Alternative ADL and work strategies	Advanced technology to further promote functional independence
Lowering the working area	Smart home system
Using safety ladder or stepper to reach cupboard at shoulder level	Automatic feeding aid
Using ergonomics device for computer or tablets	Exo-skeleton device
Utilizing aids and gadgets e.g. long-handle reacher, electrical screw-driver or electrical can opener	

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肩痛（Shoulder Pain）的中醫治療方案：中西醫協作計劃

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肩痛可能由多種疾病引起，包括但不限於肩周炎、肩關節扭挫傷、肱二頭肌長頭腱鞘炎、岡上肌肌腱炎、肩峰下滑囊炎等。肩周炎作為一種常見的肩部疼痛疾病，中西醫結合治療可以有效緩解疼痛甚至恢復功能。根據中華人民共和國中醫藥行業標準，肩周炎屬於肩痛範疇，病症可歸類為「肩痹」，又俗稱漏肩風、肩凝症、五十肩。若因肩部持續疼痛而長時間缺乏活動，導致疾病後期肌肉筋脈失養或出現粘連，使肩頸部外展功能受限，患者可能會出現「扛肩」現象。治療方法主要包括針灸、中藥、拔罐、推拿、中藥熏洗等。

根據醫管局中醫部《肌肉骨骼疼痛中西醫結合治療方案》和相關文獻，肩周炎可分為三型：¹

- 風寒濕型：** 肩部串痛，遇風寒痛增，得溫痛緩，畏風惡寒，或肩部有沉重感。舌質淡，苔薄白或膩，脈弦滑或弦緊。
- 瘀滯型：** 肩部腫脹，疼痛拒按，尤以夜間為甚。舌質暗或有瘀斑，舌苔白或淡黃，脈弦或細澀。
- 氣血虛型：** 肩部酸痛，勞累後疼痛加重，伴頭暈目眩、氣短懶言、心悸失眠、四肢乏力。舌質淡，苔少或白，脈細弱或沉。

中醫治療

- 中藥治療：**根據四診法（望、聞、問、切）診斷肩周炎的病情和分類，風寒型宜用防風湯/蠲痺湯加減；氣滯血瘀型宜用桃紅飲/身痛逐瘀湯加減；氣血兩虛型宜用補中益氣湯/八珍湯加減。
住院期間中藥治療需注意：
 - 避免處方與使用中的西藥有嚴重不良相互作用的中藥。若必須聯用，需密切監察病人體徵和潛在的不良癥狀。
 - 中藥應與口服西藥相隔最少一小時服用以避免物理性相互作用。
 - 有出血傾向病人：慎用活血藥。
 - 住院期間肝腎功能指數異常者。²
- 針灸療法：**在辯證施治的基礎上，針刺以阿是穴、肩髃、肩貞、肩前、肩髃、天宗等，配合患側曲池、手三里、陽陵泉、條口等配穴，以舒筋活絡、調節氣血。³《黃帝內經》記載「針所不為，灸所宜也」，灸法可用於寒濕痹阻性肩周炎患者。在針柄上加入適量的艾粒點燃，加強溫經散寒的力量。
在進行針刺治療前，應先排除病人的凝血功能異常。另外，還應注意以下情況，以慎用針刺治療：
 - 過於飢餓、疲勞、精神過度緊張或對針灸有恐懼時，不宜立即進行針灸。
 - 身體虛弱患者，針刺手法不宜過強，並儘量選用卧位。
 - 生命表徵異常。
 - 對消毒酒精過敏。
 - 有已知糖尿病病史及末梢血液循環較差的患者。
 - 有已知腦癇病史。⁴
- 中藥熏洗：**通過中醫辯證進行中藥配伍，煎藥後薰蒸或外敷疼痛患處，達到溫通經絡、祛風除濕、活血化瘀的效果。⁵
- 推拿按摩：**對肩關節周圍的肌肉、韌帶進行放鬆，緩解關節的僵硬。點按天宗、肩貞、肩髃、臂臑等穴位，再對有粘連部位或痛點配合推拿手法，促進血液循環、緩解肌肉疼痛和緊張感。
- 拔罐治療：**通過負壓原理將罐體吸附在體表，達到祛風散寒、通絡止痛的效果。

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以上方法為無創性治療，經濟且安全，具有一定的治療優勢。此外，刺絡拔罐法綜合了刺絡放血療法與拔罐法，可達到祛瘀生新、祛瘀行血的效果，用於緩急止痛、修復損傷組織、恢復關節功能。臨床上常將刺絡拔罐與其他中醫療法聯合治療肩周炎，有助於緩解較陳舊、頑固的肩周炎，提高肩關節活動功能。⁶

綜上所述，中醫治療肩周炎能夠綜合考慮病因病機，針對不同類型的肩周炎採取相應的治療方法，以提高治療效果、促進患者康復。

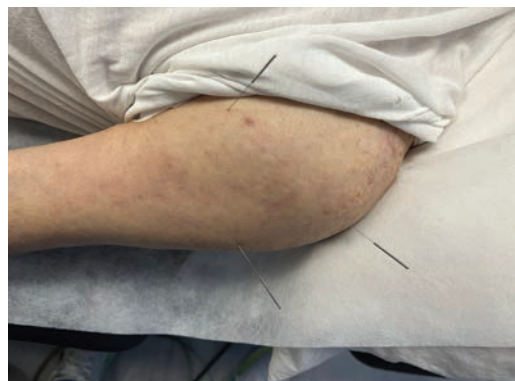


圖 | 針刺療法

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